

Figure 1

ctccagggaat tctcttttccc tcttttaggt gctggacaag ttgcataatcc 50  
 cgttanaatcc gggggcccaact ccgggagccc cctattaaag gtaagcagcc 100  
 cccaaccacac cttttgacacg gaagagtgaac tagcggggaa zataacccca 150  
 gcgcccgccct aggggtgggt gacccgcgat ctccacgccc aggtcccgc 200  
 ctcccgccttc tcccccgctc cccgcccccc gttagaggtga ccctggggagc 250  
 ggccgggggag gttggctttc ggtcttgccg gttggtgaccc gcgatctcca 300  
 cgcccaagggt ccgcccctcgc ggeccctgcc cccgcccccc ccgcaagag 350  
 gcgcccctctg ggagcgggcg ggtaacgcgg ctgggtctccc ggcttgccgg 400  
 gtggcggggt cggggctcgc ggcgtccttg gctggacccg cattgcccc 450  
 tagtgccgcg cggagtcacg gcgcccggct ccccgccctg atgtcacccg 500  
 cgtgcagtcg gcccagaagc ggctcattga agcagacccct ctccggcgct 550  
 cgctggggcg aggagccgccc gcggtccgca gacccgagcg agctggggac 600  
 cgccggggcg ccccgccctc ccccgccctc cccctccgct ccccgccgag 650  
 cccggccagg cgcgctcctg acgtggacca ttaaaacttg agctgcccgc 700  
 tcgtccccctc tccctcctct cctccctctg acaggcgagc gagcgactcg 750  
 gtgcaggcag gagacgtgct gcgggctggg ctgccccggg caagatgactc 800  
 ctgccaggag gggcgccctc gggaaagaaga ccaaggggga agcaaaagttt 850  
 cggggcagct gaggagccct cgccgcagcc ctcccgagcc caatcctccc 900  
 cctggctatg gagggcggaac tctaaagtga ATCCCGACCT GGACACCGGC 950  
 CACATACAT CAGCACCTGC CCACTGGGGA GAGTTGAAA ATGCCAATTT 1000  
 CACTGGCCCC AACACAGACT CGAGGGGGGG CACACTGCCC CAGCTGGACA 1050  
 TCACCAAGGC CATCTCTGTG GGCCTGGTGC TGGGCGCCTT CATCTCTTT 1100  
 GCCATCGTGG GCAACATCTT AGTCATCTTG TCTGTGGCCT GCAACCGGCA 1150  
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 GGCTACTGGG TGCTGGGGCG GATCTTCTGT GACATCTGGG CAGCCGTGSA 1300  
 TGCTCTGTGC TGCAACAGCT CCATTCTGAG CCGTGTGGCC ATCTCCATCG 1350  
 ATCGCTACAT CGGGGTGCGC TACTCTCTGC AGTATCCAC GCTGGTCAAC 1400  
 CGGAGGAAGC CCACTCTGGC GCTGCTCAGT GTCTGGGTCT TGTCCACCTG 1450  
 CATCTCCATC GGGCTCTCC TTGGGTGGAA GAGGCCGGCA CCCAACGATG 1500  
 ACAAGGAGTG CGGGGTCAAC GAAGAACCCT TCTATGCCCT CTCTCTCTCT 1550  
 CTGGGCTCCT TCTACATCCC TCTGGCGGTC ATTCTAGTCA TGTACTGGCG 1600  
 TGTCTATATA GTGGCCAAGA GAACCAACAA GAACCTAGAG GCAGGAGTCA 1650  
 TGAAGGAGAT TCCCAACTCC AAGGAGCTGA CCCTGAGGAT CCATTCCAG 1700  
 AACTTTACAG AGGACACCCCT TAGCAGTACC AAGGCCAAGG GCCACAACCC 1750  
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 agcttgagat gtgaaagaga agatgactag agggctcacac atttttagtt 2550  
 tttaccccaa aaatgtttct aactctagt atttatggaa tggccagaa 2600  
 caaattatag ttgtccctca tctcagctga cagagaccaa atcctggtaa 2650  
 gatggaattc gggtaaccc

noncoding sequence

SEQ No. 1

SEQ No. 3

SEQ No. 2

SEQ No. 4

A

B

Intron

Figure 2

gaaacacgc cgcgttctg tgnaggacag gggtgacitl gtcgggaig 50  
 b gcttctgtg gaggagcgc gcgaggtgc atgtcggga gctgggagg 100  
 B tgtctcag tgtatggc tgggttcgg tatagctta agcatgtc 150  
 D ccagggtga ttgtgctg tatgtcgtg cctcgggtgg cactctcgt 200  
 C tcttccgaa tgtgggagc tgggtgtg cttcctcgt cctggagac 250  
 D tcaagcgcg caggcgcga ggagggcag gtagggcca cagagggcc 300  
 D azaagctcc gggttggctg gtagcacac cacttccag tttagctc 350  
 D tggggcgcg cagggtgac ggagggcgt gtagggcca cctcaggga 400  
 C gctgtgggc cctcctggg cctgctcag gtaggggag gtaggggag 450  
 D gggtgggaaa gggtggggt gcttggccc tgggggctg cgggtgtgc 500  
 D agggggaa aggtggggt gcttggccc tgggggctg cgggtgtgc 550  
 D ctgtgacat aaggggagc aggtgtgc gtagggcca cctcaggga 600  
 D gggtgggaaa gggtggggt gcttggccc tgggggctg cgggtgtgc 650  
 C gtaggggag agtgggac acacgggac ctaggggct gtaggggct 700  
 C tgggtgggag agtgggac acacgggac ctaggggct gtaggggct 750  
 C gtaggggag agtgggac acacgggac ctaggggct gtaggggag 800  
 D AACCCGGGAA CGGCAGGCC TTCTTGCTGG CACCCAATAG AAGCCATGG 850  
 D CCGGACCAAG ACCTCAGCA GCAAGGGAC GAGGTGTGG TGGTGGGAT 900  
 D GGGCATGTC ATGTCTCTCA TCGTCTGGC CATCGTGTG GGCAATGTG 950  
 D TGGTCATCAC AGCCATTGCC AAGTTCGAG GTCTGCAGAC GGTCACCAAC 1000  
 D TACTTCATCA CTTCATGGC CTGTGTGAT CTGGTCATGG GCCTGGCAGT 1050  
 D GGTGCCCTTT GGGGCCGCC ATATTCTTAT GAAATGTGG ACTTTGGCA 1100  
 D ATTTCTGGT CGAGTTTGG ACTTCCATT ATGTGTGTG CGTCACGGCC 1150  
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 D TCATTCTGAT GGTGTGATT GTGTGAGGC TTACCTCTT CTTCGCCAT 1300  
 D CAGATGCACT GGTACCGGC CACCCACCA GAAGCCATCA ACTGCTATGC 1350  
 D CAATGAGACC TGCTGTGACT TCTTCACGA CCAAGCTAT GCCATTGCT 1400  
 D CTTCATCTGT GTCTTCTAC GTTCCCTGG TATCATGGT CTTCGTCTAC 1450  
 D TCCAGGCTT TTAGGAGGC CAAAGGCAG CTCCAGAAG TTGACATAT 1500  
 D TGAGGGCCGC TTCCATGTC AGAAGCTTAG CCAGGTGGAG CAGGATGGG 1550  
 D GGACGGGCA TGGACTCCG AGATCTTCCA AGTTCTGCT GAAGGAGCA 1600  
 D AAAGCCCTCA AGACGTTAGG CATCATGAT GGCATTTCA CCTCTGCTG 1650  
 D GCTGCCCTTC TTCTGCTTA ACATTGTGCA TGTGATCCAG GATAACCTCA 1700  
 D TCCGTAAGGA AGTTTACAT CTCTAAAT GGATAGGCTA TGTCAATTCT 1750  
 D GGTTCATAT CCTTATCTA CTGCCGAGC CCAGATTTC GATTGCTT 1800  
 D CCAGGAGCTT CTGTGCTGC GCAGGTCTT TTTGAAGGCC TATGGGAATG 1850  
 D GCTACTCCAG CAACGGCAAC ACAGGGGAG AGAGTGATA TCACGTGGAA 1900  
 D CAGGAGAAAG AAAATAAACT GCTGTGTA GACCTCCAG GCACGGAAGA 1950  
 D CTTTGTGGGC CATCAAGGTA CTGTGCTAG CGATAACATT GATTCAACAG 2000  
 D GGAGGAATTG TAGTACAAAT GACTCACTGC TGTAAAGcag tttagact 2050  
 D tttagact cccccccca acagaaact azaagagca tttagact 2100  
 D gggtaaaza cttagaaza aatgtaza tttagact azaagagca 2150  
 D ggtaggcat ccttgcct tttagact tttagact azaagagca 2200  
 D azaagact tttagact tttagact tttagact tttagact 2250  
 D gtaggact tttagact tttagact tttagact tttagact 2300

SEQ No. 5

SEQ No. 7

SEQ No. 6

SEQ No. 8

A

B

002244-4224460

Figure 3

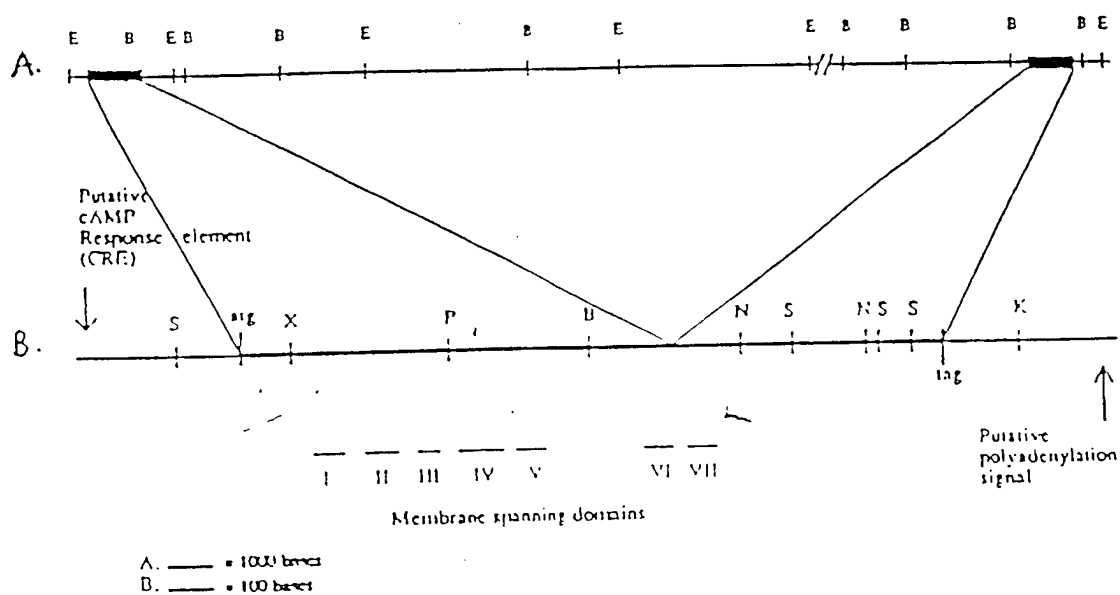


Figure 4

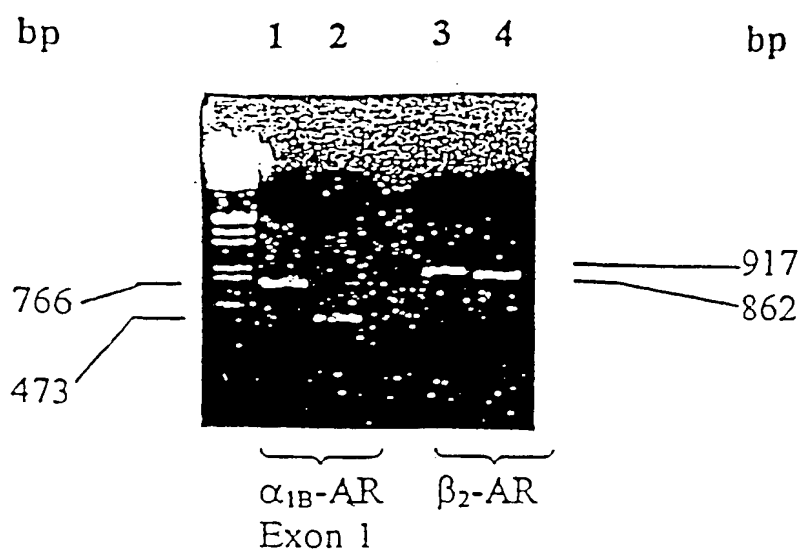
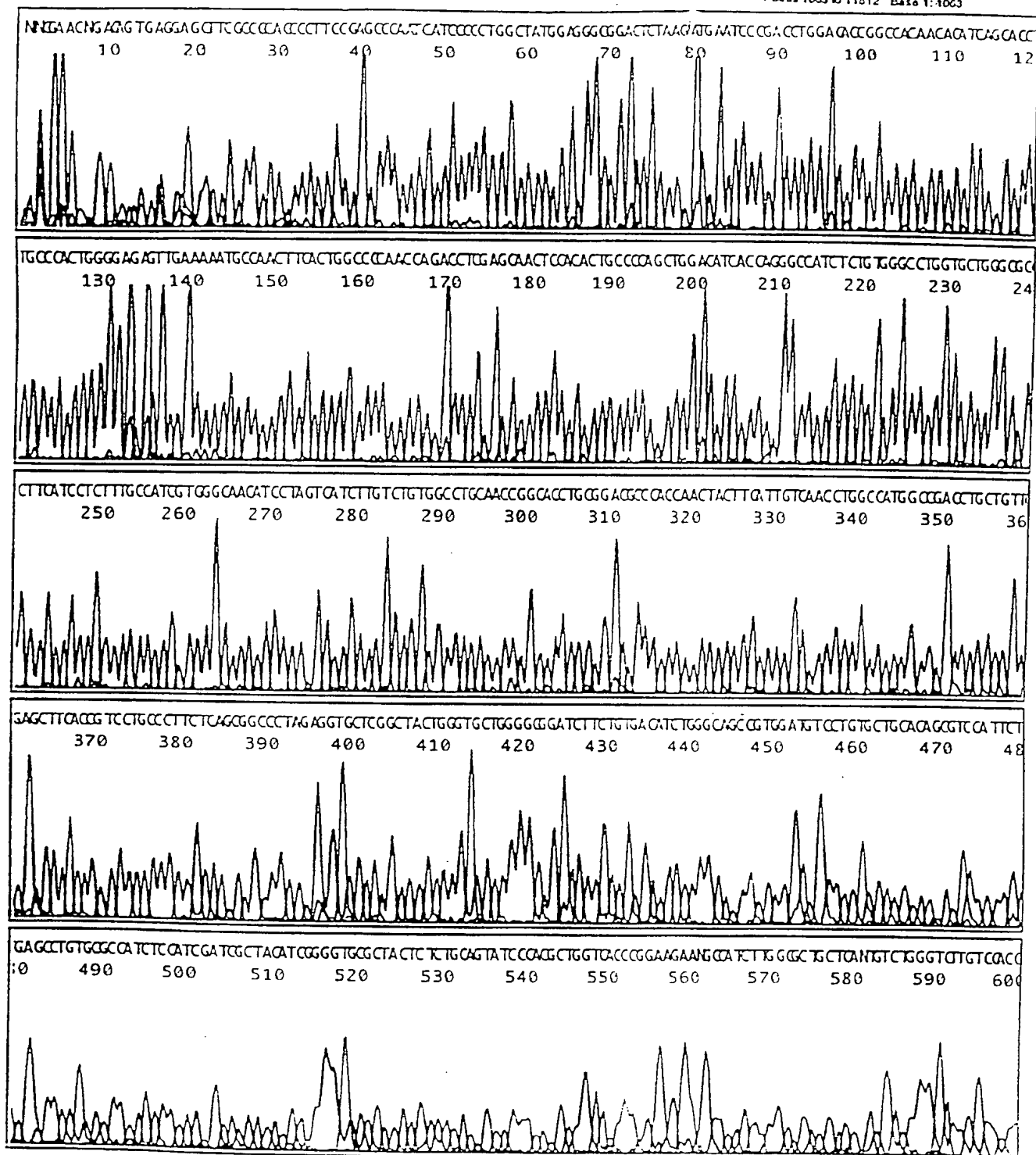
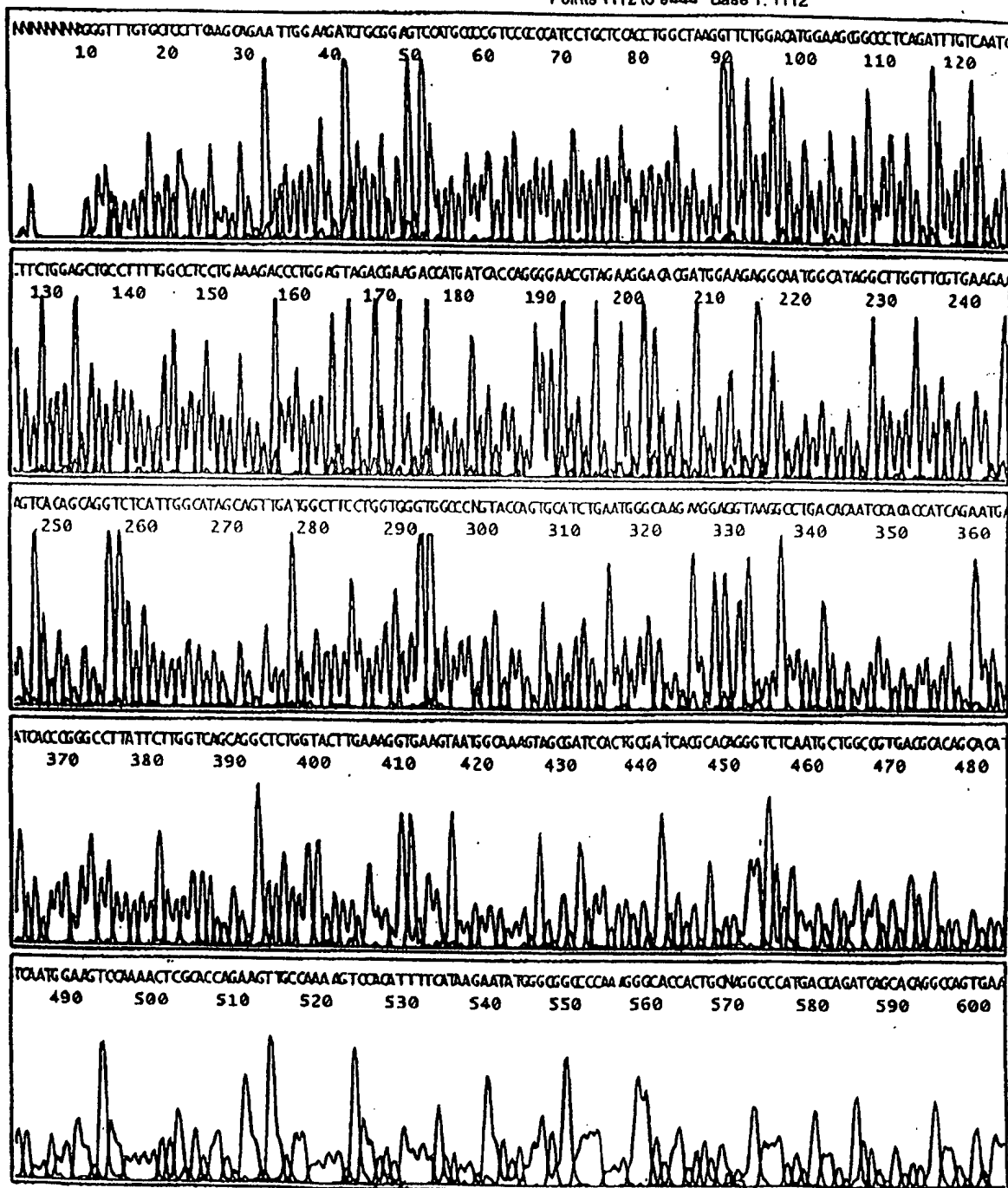


Figure 5

Signal G372 A:733 T:406 C:502  
 DT4%AC/A Set-AmyPrimer  
 96091856matrix  
 Points 1063 to 11012 Base 1:1063



Signal G:358 A:585 T:150 C:163  
DT4%Ac(A Set-AnyPrimer)  
211 fs lag  
Points 1112 to 8444 Base 1: 1112



	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105	2106	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118	2119	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131	2132	2133	2134	2135	2136	2137	2138	2139	2140	2141	2142	2143	2144	2145	2146	2147	2148	2149	2150	2151	2152	2153	2154	2155	2156	2157	2158	2159	2160	2161	2162	2163	2164	2165	2166	2167	2168	2169	2170	2171	2172	2173	2174	2175	2176	2177	2178	2179	2180	2181	2182	2183	2184	2185	2186	2187	2188	2189	2190	2191	2192	2193	2194	2195	2196	2197	2198	2199	2200	2201	2202	2203	2204	2205	2206	2207	2208	2209	2210	2211	2212	2213	2214	2215	2216	2217	2218	2219	2220	2221	2222	2223	2224	2225	2226	2227	2228	2229	2230	2231	2232	2233	2234	2235	2236	2237	2238	2239	2240	2241	2242	2243	2244	2245	2246	2247	2248	2249	2250	2251	2252	2253	2254	2255	2256	2257	2258	2259	2260	2261	2262	2263	2264	2265	2266	2267	2268	2269	2270	2271	2272	2273	2274	2275	2276	2277	2278	2279	2280	2281	2282	2283	2284	2285	2286	2287	2288	2289	2290	2291	2292	2293	2294	2295	2296	2297	2298	2299	2300	2301	2302	2303	2304	2305	2306	2307	2308	2309	2310	2311	2312	2313	2314	2315	2316	2317	2318	2319	2320	2321	2322	2323	2324	2325	2326	2327	2328	2329	2330	2331	2332	2333	2334	2335	2336	2337	2338	2339	2340	2341	2342	2343	2344	2345	2346	2347	2348	2349	2350	2351	2352	2353	2354	2355	2356	2357	2358	2359	2360	2361	2362	2363	2364	2365	2366	2367	2368	2369	2370	2371	2372	2373	2374	2375	2376	2377	2378	2379	2380	2381	2382	2383	2384	2385	2386	2387	2388	2389	2390	2391	2392	2393	2394	2395	2396	2397	2398	2399	2400	2401	2402	2403	2404	2405	2406	2407	2408	2409	2410	2411	2412	2413	2414	2415	2416	2417	2418	2419	2420	2421	2422	2423	2424	2425	2426	2427	2428	2429	2430	2431	2432	2433	2434	2435	2436	2437	2438	2439	2440	2441	2442	2
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